REMARKS/ARGUMENTS

The office action mailed on September 29, 2010, has been reviewed and carefully considered. Claims 32-39, 41-49, 51-57 and 59-67 are pending before this amendment. Reconsideration is respectfully requested.

Amendments to the Claims

Claims 32-39, 41-49, 51-57 and 59-67 pending in the present application; among them, claims 32 and 50 are independent claims. Claims 32, 41-43, 50, and 59-61 have been amended. No new matter has been added.

Specification

In the office action (page 6), the specification stands objected to for failing provide antecedent basis for the claimed subject matter. The rejection is now moot since the following limitations of --without receiving a request from the user terminal and without any searching for the determined contents-- have been deleted.

Claim Rejections - 35 U.S.C. §103

In the office action (page 7), claims 32-39, 41-43, 49, 51-57, 59-61 and 67 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2004/0220926 (Lamkin) further in view of U.S. Patent No. 7,185,049 (Benitez).

In the office action (page 15), claims 44-48 and 62-66 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lamkin in view of Benitez and further in view of U.S. Patent No. 7,055,168 (Errico).

Comments for overcoming the 103 Rejections

Claim 32 (and similarly claim 50) has been amended to better clarify the presently claimed invention, which recites inter alia:

--wherein the relation metadata ~~include~~ **comprises**:

temporal relation information ~~for describing a temporal sequence of~~ is configured based on contents consumption and
wherein the temporal relation information describes a temporal sequence; and
spatial relation information ~~for describing relative locations of~~ is configured based on the contents consumption,
wherein the spatial relation information describes relative location, ~~and~~
wherein the content consumption is configured based on the targeting condition metadata for the described conditions--.

The presently claimed invention relates to a package metadata and targeting/synchronization service providing system; and, more particularly, to a package metadata and targeting and synchronization service providing system that applies digital Item Declaration (DID) of a Moving Picture Experts Group (MPEG) 21 **to television (TV)-Anytime service**.

As previously explained, conventional targeting and synchronization service, which is now under standardization progress in Calls For Contributions (CFC), which is Television (TV)-Anytime Phase 2 of Metadata Group, is similar to a personal program service which is appropriate for an environment that consumes user preference suggested conventionally and new types of contents including video, audio, image, text, Hypertext Markup Language (HTML) (refer to TV-Anytime contribution documents AN515 and AN525). That is, the conventional targeting and synchronization service automatically filters and delivers personalized content services properly to a terminal, a service environment, and user profile in consideration of synchronization between contents.

Hereafter, the conventional targeting and synchronization service scenario is detail. Generally, family members of a family consume audio/video (AV) programs in their own ways in a home network environment connecting diverse media devices, such as Personal Digital Assistant (PDA), Moving Picture Experts Group (MPEG) Audio Layer 3 (MP3) player, Digital Versatile Disc (DVD) player and the like.

For example, the youngest sister who is an elementary school student likes to watch a sit-com program on a High-Definition (HD) TV. On the other hand, an elder sister who is a college student likes to watch a sit-com program with a Personal Digital Assistant (PDA) through multi-lingual audio stream to improve her language skill.

As show above, the contents consumption pattern is different according to each person and it depends on a variety of conditions such as terminals, networks, users, and types of contents.

Therefore, a contents and service provider in the business of providing a personalized service properly to a service environment and user profile requires a targeting service to provide the content to be consumed by the respective user's desire from the type of terminal that the user is using.

Also, the TV-Anytime phase 2 allows users to consume not only the simple audio/video for broadcasting **but also diverse forms of contents including video, audio, moving picture, and application programs**. These different forms of contents can make up an independent content.

Furthermore, it is also possible to form content with **temporal, spatial and optional relations between them**. In the case of forming the content with temporal, spatial and optional relations between them, a synchronization service which describes the time point of each content consumption by describing the temporal relations between a plurality of contents is necessary to make a user consume the content equally with the other users or consume content in the form of a package consistently even though it is used several times.

Accordingly, the presently claimed invention discloses that in order to identify packages and constitutional elements, **the temporal and spatial formation of the constitutional elements and the relation between are more specified** (i.e.; per user's desire for the user's particular device). Also in the presently claimed invention, metadata for conditions describing a usage environment in which the target service is used are user and device specified, and metadata for describing information on the types of the components are embodied for the user and user's particular terminal.

That is, the presently claimed invention provides package metadata for a targeting and synchronization service where this above mentioned temporal and spatial formation of the constitutional elements and the relation between are more specified wherein the relation metadata **include temporal relation information based on contents consumption such that the temporal relation information describes a temporal sequence for the user's particular device; and spatial relation**

information is also based on the contents consumption such that the spatial relation information describes relative location for the user particular device, wherein the content consumption is configured based on the targeting condition metadata for the described conditions. As a result, **the presently claimed invention provides content formed of components to diverse terminals in the form of a package in a targeting and synchronization service providing system** and this is all done **without requiring any type of request from the user terminal and without any additional searching for the determined content to find the appropriate content** such that the package metadata which include: package description information for selecting a package desired by a user and describing general information on an individual package to check whether the selected package can be acquired; and container metadata for describing information on a container which is a combination of diverse packages and formed of a set of items, each of which is a combination of components.

 As a result, the presently claimed invention described above applies Moving Picture Experts Group (MPEG)-21 Digital Item Declaration (DID) to television (TV)-Anytime service effectively by discriminating constitutional elements from packages, specifying temporal (i.e.; **information for describing a temporal sequence of contents consumption**), spatial (i.e.; **information for describing relative locations of the contents consumption**) for a user's particular desires and particular user device, and **interactive relation between the constitutional elements**, specifying conditions of metadata describing an environment used for a targeting and synchronization service, and providing concrete metadata describing each constitutional element.

 Nowhere in Lamkin, discloses or suggests the presently claimed invention of claim 32 (and similarly claim 50) as amended, which recites as follows: --wherein the relation metadata comprises: temporal relation information is configured based on contents consumption and wherein the temporal relation information describes a temporal sequence; and spatial relation information is configured based on the contents consumption, wherein the spatial relation information describes relative location, wherein the content consumption is configured based on the targeting condition

metadata for the described conditions--. The Benitez and/or Errico reference(s) fails to cure this defect of Lamkin.

The examiner interprets the claimed spatial relationship as regarding specific region on the display screen for multiple sub-window as described in the specification at Table 11, which the applicants believe appropriate content of package metadata is not received at the user's device being based on the user's own environment, which does not include for example the **appropriate content** of the packaged metadata having for example: package description information for selecting a package **desired by a user** and **describing general information on an individual package to check whether the selected package can be acquired**; and container metadata for describing information on a container which is a combination of diverse packages and formed of a set of items, each of which is a combination of components.

In contrast, Lamkin **only** discloses temporal relation information (Lamkin [0376]), where Lamkin describes that the collection metadata can include information about **when along the timeline** each of the entities will be displayed in relation to the other entities. Lamkin demonstrates this difference for **not** having spatial relation information from the presently claimed invention, which has **"spatial relation information configured based on the contents consumption, wherein the spatial relation information describes relative location and wherein the content consumption is configured based on the targeting condition metadata for the described conditions"**, because Lamkin shows each entity being displayed **according to the master timeline**. That is, Lamkin **only** discloses temporal information (i.e.; no spatial relationship based on the content consumption for a targeted device) by showing each entity according to the master timeline without taking into consideration of the user's environment.

Accordingly, nowhere in the examiner's cited references and especially Lamkin, neither alone or in combination, teaches, discloses, or mentions the each and every one of the limitations recited in amended claim 32 (and similarly claim 50) of the presently claimed invention, which recites inter alia: --wherein the relation metadata comprises: temporal relation information is configured based on contents consumption and wherein the temporal relation information describes a temporal sequence; and spatial relation

information is configured based on the contents consumption, wherein the spatial relation information describes relative location, wherein the content consumption is configured based on the targeting condition metadata for the described conditions--.

Therefore, an indication of allowable subject matter with respect to claim 32 is respectfully requested.

As to claims 33-39 and 41-49, the applicant respectfully submits that these claims are allowable at least since they depend from claim 32, which is now considered to be in condition for allowance for the reasons above.

As to independent claim 50, independent claim 50 recites similar features to those found in claim 32. Therefore, for reasons analogous to those argued above with respect to claim 32, claim 50 is patentable over the applied references.

As to claims 51-57 and 59-67, the applicant respectfully submits that these claims are allowable at least since they depend from claim 50, which is now considered to be in condition for allowance for the reasons above for claim 32.

Conclusion

For the reasons set forth above, the applicants respectfully submits that claims 32-39, 41-57, and 59-67, now pending in this application, are in condition for allowance over the cited references. Accordingly, the applicant respectfully requests reconsideration and withdrawal of the outstanding rejections and earnestly solicit an indication of allowable subject matter.

This amendment is considered to be responsive to all points raised in the office action.

     Should the examiner have any remaining questions or concerns, the examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve those concerns.

Respectfully submitted,

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